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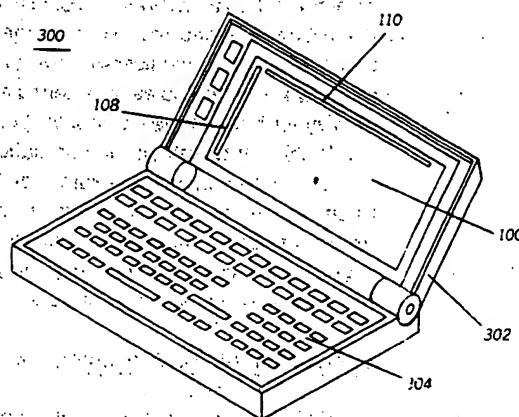
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(54) Embedded antenna for communication devices.

(57) A radio communication device (300) having a display terminal (100) includes a glass portion (102) with an antenna (108) deposited thereon. The radio communication device (300) also includes a receiver (408) for receiving a radio communication signal. Radio communication signals are coupled to the receiver (408) via the antenna (108). In another aspect of the present invention, the radio communication device (300) includes a metal frame (206) which operates as its antenna and secures the display terminal (204) to the radio communication device (300).

FIG. 3



EP 0 543 645 A1

6. The radio of claim 4, wherein the display comprises a Liquid Crystal Display (LCD).

7. The radio of claim 4, wherein the antenna is a loop antenna.

8. A communication device for receiving a radio frequency communication signal, the device comprising:

a liquid crystal display having a glass portion;

at least one loop antenna printed on the glass portion;

a metal frame for securing the display to the device, the frame providing the return path for the at least one loop antenna; and

a receiver coupled to the antenna for receiving the radio frequency communication signal.

9. A communication device for receiving a radio frequency communication signal, the communication device comprising:

a display having a glass portion;

a receiver for receiving the radio communication signal; and

a metal frame antenna for coupling the radio communication signal to the receiver and mechanically securing the display to the communication device.

10. A communication device for receiving a radio frequency communication signal, the device comprising:

a liquid crystal display having a glass portion;

at least one loop antenna printed on the glass portion; and

a receiver coupled to the antenna for receiving the radio frequency communication signal.

FIG.1

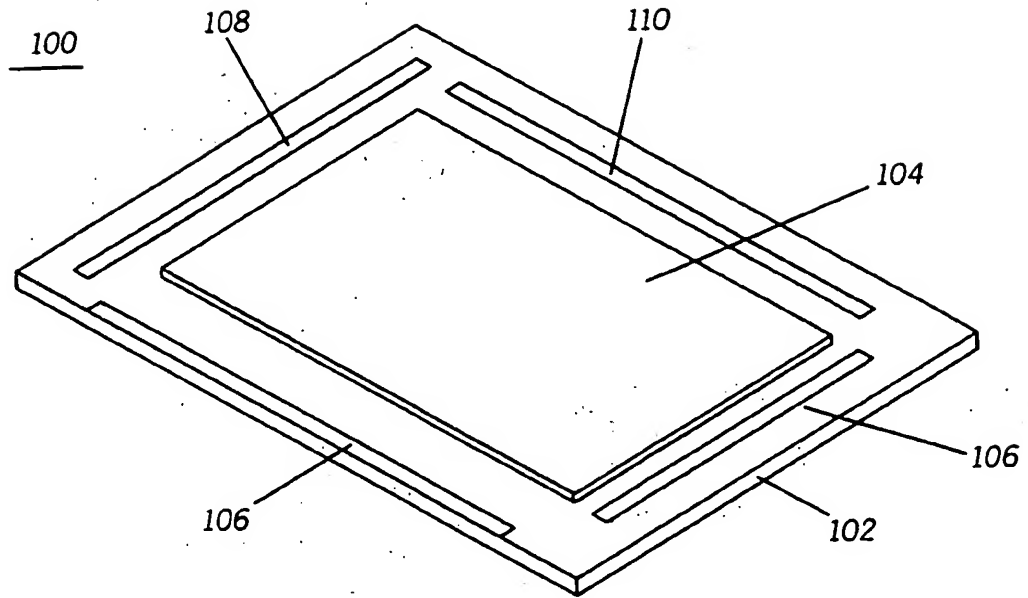


FIG.2

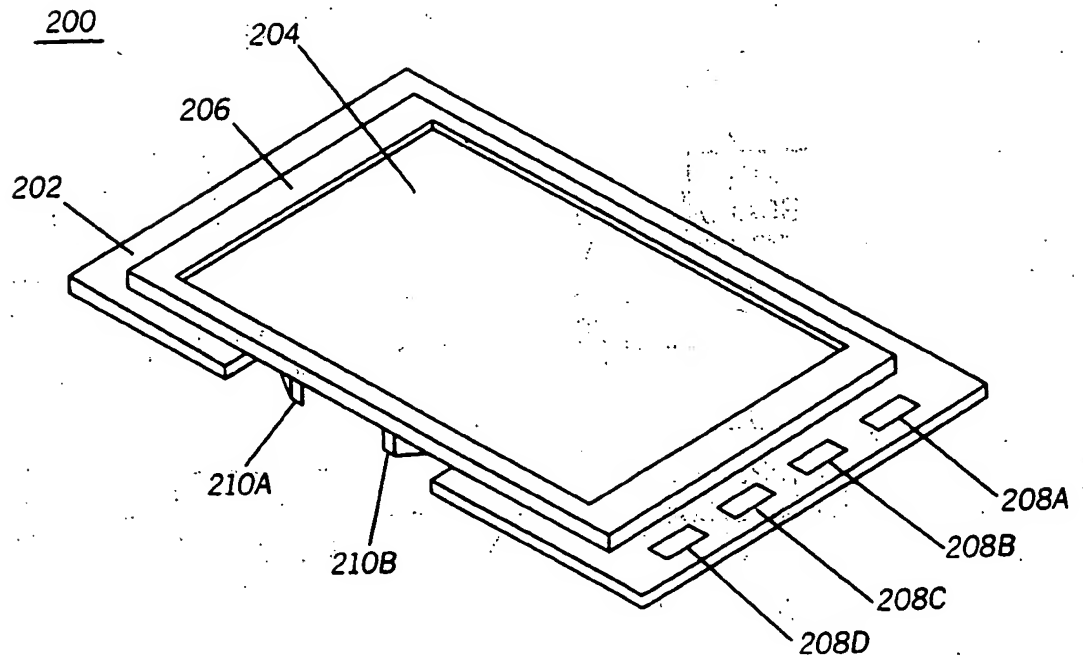


FIG. 3

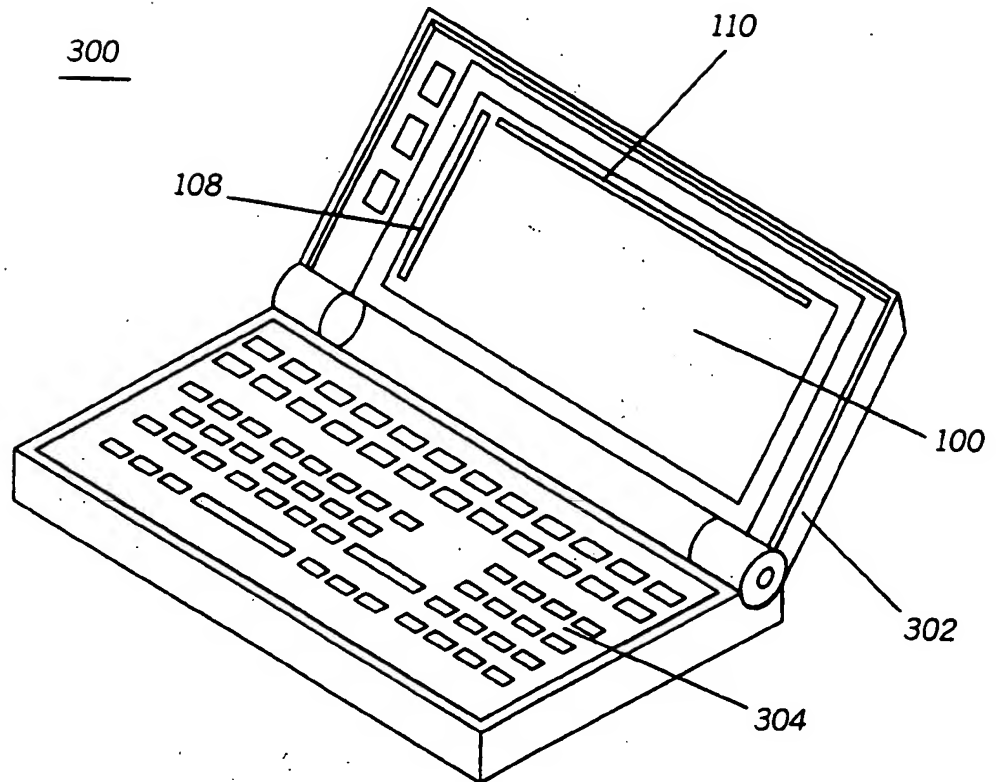
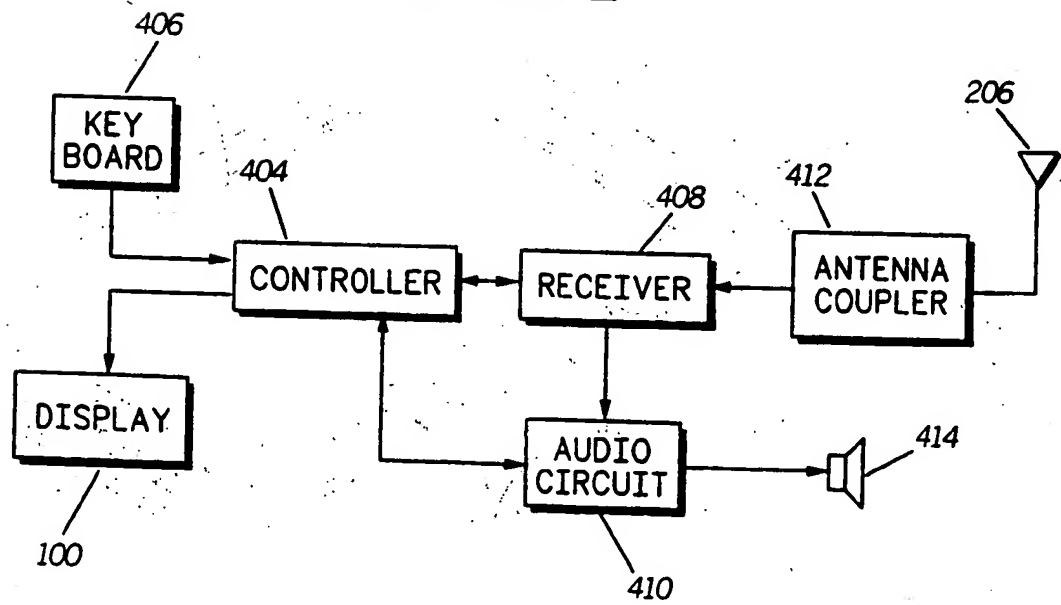


FIG. 4



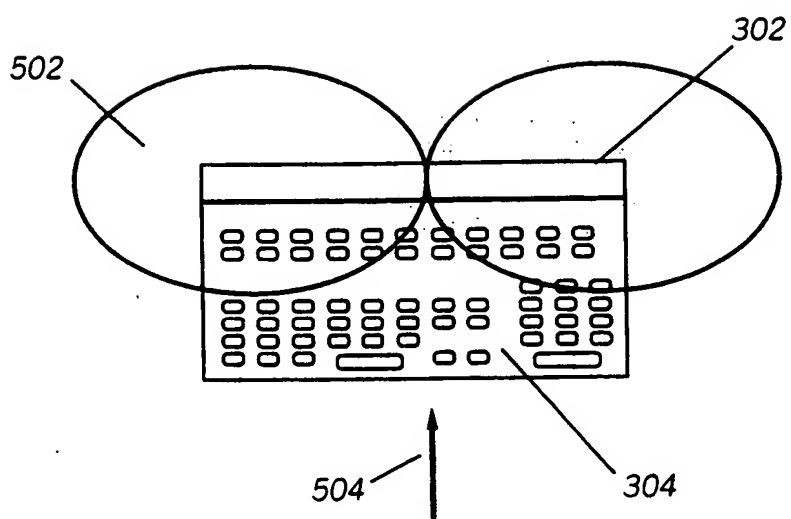


FIG. 5



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 92 31 0537

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	GB-A-2 217 538 (NEC) * page 2, line 5 - line 25; figures 1-4 *	1-10	H01Q1/24
Y	US-A-4 727 377 (YOTSUYA ET AL.) * abstract; figures 1,10-16 *	1-10	
A	EP-A-0 274 592 (YAGI ANTENNA) * column 2, line 20 - line 41; figure 2 * * column 4, line 44 - column 5, line 12; figures 1-31 *	1-10	
A	US-A-5 048 118 (BROOKS ET AL.) * claims 1-11; figures 1-4 *	1,4,8-10	
A	US-A-4 644 366 (SCHOLZ) * abstract; figures 1-5 *	1,4,8-10	
A	EP-A-0 347 151 (DOWTY MINING) * claims 1-10; figures 1-4 *	1,4,8-10	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H01Q
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 04 MARCH 1993	Examiner ANGRABEIT F.F.K.
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